



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4415/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Iron Ore (Hamersley Range) Agreement Act 1963, Special Lease for Mining Operations
3116/4011, Lot 15 on Deposited Plan 241372
Local Government Area: Shire of Ashburton
Colloquial name: Weelumurra Rail Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		Mechanical Removal	Installation of communications trailer and construction of firebreak

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 28 July 2011

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. One Beard vegetation association has been mapped within the application area:

Beard vegetation association 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana* (Shepherd, 2009; GIS Database).

Biota Environmental Sciences (2010) conducted a flora survey of the application area and surrounding areas on 12 to 13 May 2010, and described two vegetation communities of the application area:

Disturbed: Area has been ripped and supported mixed low shrublands dominated by *Corchorus* species over scattered grasses. Scattered planted Eucalypts that appear to be River Gums (*Eucalyptus camaldulensis*) were also present in these areas, along with ornamental *Grevillea* and *Myoporum* species; and

EITw: *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Triodia wiseana* hummock grassland. This vegetation type occurred on stony hills. Associated species included *Acacia ancistrocarpa*, *A. pruinocarpa*, *A. inaequilatera*, *Hakea lorea* subsp. *lorea*, *Ptilotus calostachyus* subsp. *calostachyus* and *Trichodesma zeylanicum* var. *zeylanicum*.

Clearing Description Hamersley Iron is proposing to clear up to 1 hectare of native vegetation for the Weelumurra Rail Project. The clearing of vegetation is required for the installation of a communications trailer and the construction of a firebreak.

The vegetation will be cleared using a dozer with the blade down. The vegetation and topsoil will be stockpiled and used in rehabilitation.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

To:

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment The application area is located in the Hamersley subregion of Western Australia and is situated approximately 49 kilometres north of Tom Price.

The vegetation condition was derived from a vegetation survey conducted by Biota Environmental Sciences (2010).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is not likely to be at variance to this Principle

The application area occurs within the Hamersley (PIL3) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by mountainous area of Proterozoic ranges and plateaux with Mulga (*Acacia aneura*) low woodland over bunch grasses on fine textured soils, and Snappy Gum low trees over *Triodia brizoides* hummock grasslands on the skeletal sandy soils of the ranges (Environmental Australia, 2000). The vegetation within the application area consists of Beard vegetation association 82, which is common and widespread throughout the Pilbara bioregion with approximately 100% of the pre-European vegetation extent remaining (Shepherd, 2009; GIS Database).

A vegetation survey by Biota Environmental Sciences (2010) between 12 to 13 May 2010 of the application area and surrounding vegetation identified 54 species of flora taxa belonging to 39 Genera and 18 Families. Biota Environmental Sciences (2010) identified two vegetation communities within the application area. The condition of the vegetation types were classified as 'completely degraded' to 'very good' (Keighery, 1994; GIS Database).

A search of the Department of Environment and Conservation Declared Rare and Priority Flora databases revealed no Priority Flora species which may potentially occur within a 20 kilometre radius of the application area (DEC, 2011). No Declared Rare Flora (DRF) species were identified (DEC, 2011). Biota Environmental Sciences (2010) identified no DRF and no Priority species within the application area.

No Threatened Ecological Communities or Priority Ecological Communities were recorded or identified within the application area (GIS Database).

Two species were identified during the survey: Birdwood Grass (*Cenchrus setiger*) and Spiked Malvastrum (*Malvastrum americanum*) (Biota Environmental Sciences, 2010). None of these species are listed by the Western Australian Department of Agriculture and Food as Declared Plants. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The fauna habitats within the application area is considered to be common and widespread within the subregion and faunal assemblages are unlikely to be different to that found in similar habitat located elsewhere in the region (Biota Environmental Sciences, 2011). The application area is disturbed and has been previously cleared for a temporary accommodation village and associated infrastructure (Biota Environmental Sciences, 2010). Given this disturbance the application area is not likely to comprise of a high level biological diversity.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

Biota Environmental Sciences (2010)
DEC (2011)
Environmental Australia (2000)
Keighery (1994)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation
- Threatened Ecological Sites Buffered

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal is not likely to be at variance to this Principle

No targeted fauna surveys have been conducted over the application area. A vegetation survey conducted by Biota Environmental Sciences (2010) identified two broad fauna habitat types;

1. Eucalyptus species and *Corymbia hamersleyana* over Acacia and Grevillea shrublands over hummock and tussock grasslands on stony plains with a loamy substrate; and
2. *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia ferriticola* over Acacia species shrublands of *Triodia wiseana* on stony hills.

Biota Environmental Sciences (2010) identified the vegetation condition to be 'degraded' to 'very good' (Keighery, 1994). The application area does not contain habitats or faunal assemblages that are ecologically significant and it is unlikely that any species of conservation significance will be significantly impacted by the clearing of native vegetation in the application area. There is approximately 100% of the pre-European vegetation remaining within the Pilbara bioregion (Shepherd, 2009; GIS Database). Given the extent of the native vegetation remaining in the local area and bioregion, the vegetation to be cleared does not represent a significant ecological link.

There are no species of conservation significance listed as either threatened species under the *Environment Protection and Biodiversity Conservation Act (EPBC) 1999* or protected under Western Australian legislation (*Wildlife Conservation Act 1950*), that may potentially occur within a 20 kilometre radius of the application area (DEC, 2011). The proposed clearing of one hectare of native vegetation is unlikely to have a significant impact on the conservation status of potentially occurring threatened fauna, given that there is little or no core habitat represented within the application area (Biota Environmental Sciences, 2010).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biota Environmental Sciences (2010)
DEC (2011)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments Proposal is not likely to be at variance to this Principle

According to available databases, there are no records of Declared Rare Flora (DRF) within the application area (GIS Database). A search of the Department of Environment and Conservation's NatureMap database identified no DRF species as occurring within a 40 kilometre radius of the application area (DEC, 2011).

Biota Environmental Sciences (2010) conducted a vegetation and flora survey of the application area and surrounding area on 12 to 13 March 2010. No DRF were recorded within the survey area.

Based on the above, the proposed clearing is not likely to be variance to this Principle.

Methodology Biota Environmental Sciences (2010)
DEC (2011)
GIS Database:
- Declared Rare and Priority Flora List

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments Proposal is not likely to be at variance to this Principle

A search of the available databases shows that the application area sits within the outer edge of the buffer zone of the 'Hamersl01' Threatened Ecological Community (TEC) (GIS Database; Biota Environmental Sciences, 2010). 'Hamersl01' is identified as the Themeda grasslands. This TEC is characterised as grassland plains which are dominated by the perennial Themeda (kangaroo grass) and many annual herbs and grasses (CALM, 2002; DEC, 2010). The vegetation units mapped within this application area does not match the vegetation units which comprise the TEC. The clearing of one hectare of native vegetation is not likely to impact upon this TEC.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biota Environmental Sciences (2010)
CALM (2002)
DEC (2010)
GIS Database:
- Threatened Ecological Sites Buffered

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments Proposal is not at variance to this Principle

The application area falls within the Pilbara IBRA bioregion (GIS Database). The vegetation within the application area is recorded as Beard vegetation association 82: Hummock grasslands, low tree steppe: Snappy Gum over *Triodia wiseana* (GIS Database; Shepherd, 2009).

According to Shepherd (2009), Beard vegetation association 82 retains approximately 100% of its pre-European extent. Therefore, the area proposed to be cleared is not a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Pilbara	17,804,193.01	17,785,000.82	~99.89	Least Concern	6.32
Beard vegetation associations - State					
82	2,565,901.3	2,565,901.3	~100	Least Concern	10.24
Beard vegetation associations - Bioregion					
82	2,563,583.2	2,563,583.2	~100	Least Concern	10.25

* Shepherd (2009)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is not likely to be at variance to this Principle

According to available databases there is one minor non-perennial drainage line within the application area (GIS Database). As the ephemeral drainage line located within the application area is only likely to flow following significant rainfall (Biota Environmental Sciences, 2010), the proposed clearing of one hectare is unlikely to result in any significant impact to any watercourse or wetland. Based on vegetation mapping by Biota Environmental Sciences (2010), the vegetation within the application area is not considered to be growing in association with any watercourse or wetland.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biota Environmental Sciences (2010)
GIS Database:
- Geodata, Lakes
- Hydrography, Linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is not likely to be at variance to this Principle

The application area is mapped as the Newman land system (GIS Database).

The Newman land system is described as rugged jaspilite plateau, ridges and mountains supporting hard spinifex grasslands (Van Vreeswyk et al., 2004). It contains erosional surfaces; plateaux and mountains with rectangular tributary drainage patterns of narrow valleys and gorges with narrow drainage floors and channels (Van Vreeswyk et al., 2004). This land system is not generally susceptible to erosion.

Given the low levels of susceptibility to erosion and the small area to be cleared, the one hectare of native vegetation to be cleared is not likely to cause appreciable land degradation.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Van Vreeswyk et al. (2004)
GIS Database
- Rangeland Land System Mapping

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments Proposal is not likely to be at variance to this Principle

The proposed application area is not located within any conservation area (GIS Database). The nearest conservation area is Karijini National park, located approximately 28 kilometres east of the application area (GIS Database).

Given the distance of the application area from the Karijini National Park, the proposed clearing is not likely to provide a significant ecological linkage or fauna movement corridor and is not likely to impact the environmental values of the conservation area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- DEC Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments Proposal is not likely to be at variance to this Principle

The application area occurs within the Millstream Water Reserve, a Public Drinking Water Source Area (PDWSA) gazetted under the *Country Areas Water Supply Act 1947* in March 2011. This PDWSA is defined a 'Priority 2 (P2)' under the Water Source Protection Classification System (Department of Water, 2011). The Department of Water (DoW) is satisfied that the proposed clearing of one hectare is unlikely to have a significant impact on the quality or quantity of groundwater, provided activities are carried out in accordance with DoW advice and guidelines. The application area is located within the proclaimed Pilbara groundwater area under the *Rights in Water and Irrigation Act 1994* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the DoW (Department of Water, 2011).

There is one non-perennial drainage tract transecting the application area (GIS Database). These drainage tracts are dry for most of the year and only flow after significant rainfall events (Biota Environmental Sciences, 2010). The application area experiences an arid (semi-desert) tropical climate with summer cyclonic rains or thunderstorm events, where the annual pan evaporation rate greatly exceeds the annual rainfall average (BoM, 2011; CALM, 2002). There is little surface flow during normal seasonal rains. The proposed clearing of one hectare is not likely to cause the quality of surface water to deteriorate.

Groundwater within the application area is potable, with salinity levels between 500 - 1,000 milligrams/Litre Total Dissolved solids (TDS) (GIS Database). The small amount of native vegetation proposed to be cleared is unlikely to deteriorate the quality of underground water.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biota Environmental Sciences (2010)
BoM (2011)
CALM (2002)
Department of Water (2011)
GIS Database:
- Geodata, Lakes
- Hydrography, Linear
- Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposal is not likely to be at variance to this Principle

The application area experiences an arid (semi-desert) tropical climate with summer cyclonic rains or thunderstorm events, with an annual average of approximately 404.8 millimetres per year (CALM, 2002; BoM, 2011). Based on an average annual evaporation rate of 3,200 - 3,600 millimetres (BoM, 2011), any surface water resulting from rainfall events is likely to be relatively short lived.

The small clearing size of one hectare in comparison to the size of the Fortescue River catchment area (1,860,784,300 hectares) (GIS Database) is not likely to lead to an appreciable increase in run off, and subsequently cause or exacerbate the incidence or intensity of flooding.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biota Environmental Sciences (2010)
BoM (2011)

CALM (2002)
GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, Linear

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There is one Native Title Claim (WC97/89) over the area under application (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There is no registered Aboriginal Site of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment and Conservation and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 20 June 2011 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to the proposed clearing.

Methodology

GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Registered with the NNTT

4. References

- Biota Environmental Sciences (2010) Weelumurra Rail Construction Camp: Native Vegetation Clearing Permit Report. Prepared for Rio Tinto Iron Ore, May 2010.
- BoM (2011) Climate Statistics for Australian Locations. A Search for Climate Statistics for Tom Price, Australian Government Bureau of Meteorology, viewed 20 July 2011, <http://reg.bom.gov.au/climate/averages/tables/cw_005072.shtml>.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 3 (PIL3 - Hamersley subregion) Department of Conservation and Land Management, Western Australia.
- DEC (2010) List of Threatened Ecological Communities on the Department of Environment and Conservation's Threatened Ecological Community (TEC) Database endorsed by the Minister for the Environment. Species & Communities Branch, Department of Environment and Conservation, Perth, August 2010.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Department of Water (2011) Advice provided to the Department of Mines and Petroleum for Clearing Permit Application GPS 4415/1 on 26 July 2011.
- Environmental Australia (2000) Revision of the Interim Biogeographic Regionalisation for Australia (IBRA) and Development of Version 5.1, Summary Report. Environment Australia, November 2000.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A & Hennig, P. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, Western Australia.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia

DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2** **Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3** **Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4** **Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R** **Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X** **Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2** **Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4** **Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need

of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

P5 **Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)

EX **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

EX(W) **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

EN **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

VU **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.